

## SITREP.08.0

### **A SITUATION REPORT ON EMERGENCY TRANSBOUNDARY OUTBREAK PESTS (ETOPS) FOR AUGUST WITH A FORECAST TILL MID-OCTOBER, 2002**

#### **SUMMARY**

1. Summary: This report provides an update about recent activities on emergency transboundary outbreak pests (ETOPs) in Africa, the Middle-East, Central and Southwest Asia, and Latin America. The report covers activities in August and a forecast till mid-October, 2002. Key ETOPs, including the desert, Italian, the African migratory, red, brown, Moroccan, and the Madagascar migratory locusts, grasshoppers, armyworm and grain-eating red-billed quelea birds are covered by the report. A brief overview of the current status of each of these pests is outlined in the remainder of this summary with detailed accounts provided thereafter.

#### **DESERT LOCUST, *SCHISTOCERCA GREGARIA* (FORSKAL)**

2. **Desert locust, *Schistocerca gregaria* (Forsk.)**. The desert locust situation remained calm in August in the summer breeding areas in Sahelian west Africa. Insignificantly low numbers of isolated adults were reported in a few places in Mauritania and Niger. Small-scale breeding

could occur

in Sahelian west Africa during the forecast period, however, significant developments are not likely.

3. With the exception of isolated adults that were seen in the coastal plains of Yemen near Aden and the hopper bands that were sighted mixed with the African migratory locust, *Locusta migratoria* (Walker) and treated on 400 ha in the Western Desert Region, Egypt, no locusts were reported in the central region of the desert locust outbreak area. A few isolated adults may appear and persist during the forecast period in areas where rains fell recently in Sudan, Eritrea and Yemen while other countries in the region will most likely remain free of locusts.

4. No significant locust populations were reported from the summer breeding areas in the eastern part of the desert locust outbreak regions. Only very few, isolated adults at a density of six insects per hectare were seen in Tharparkar and the Cholchistan Desert, Pakistan along the Indian border during the second half of July and the first week of August. Locust numbers will continue to decline during the forecast period unless more rains fall.

#### **OTHER LOCUSTS AND GRASSHOPPERS.**

5. **Red locust, *Nomadacris septemfasciata* (Surville)**. Several red locust swarms and concentrations of different sizes and densities were sighted and controlled in the Iku-Katavi, Malagarasi and Wembere outbreak areas in Tanzania. Surveys and control operations were carried out by IRLCO-CSA in

collaboration with the Plant Health Services of the Ministry of Agriculture and Food Security, of Tanzania and the Desert Locust Control Organization for Eastern Africa (DLCO-EA). The U.N. Food and Agricultural Organization (FAO) provided financial and technical assistance. Control operations were carried out on more than 6,100 ha using close to 3,000 liters of Fenitrothion 96% ULV. The red locust situation in the other outbreak areas, including Lake Chilwa plains in Malawi, Buzi-Gorongosa plains in Mozambique, Lake Rukwa plains in Tanzania, Kafue Flats and Mweru wa Ntipa plains in Zambia, remained relatively quite.

6. **Madagascar migratory locust, *Locusta migratoria capito* (L.)**. No detailed information was received on the Malagasy migratory locust at the time this report was compiled. A locust assessment report being prepared by an FAO expert is expected to be released soon. Meanwhile, the National Environmental Office and the Department of Plant Protection conducted an environmental assessment on locust control to satisfy a requirement by the World Bank for disbursing funds for locust control. The assessment recommended that Fipronil can only be applied as a barrier treatment when used for locust control, GIS capability should be strengthened, a strategy for locust early warning system should be developed and locust operations should be decentralized.

7. No reports were received on the African migratory locust, ***Locusta migratoria*** (Linne), brown locust(except for the activities reported under section 3, above), ***Locustana pardalina*** (Walker), Moroccan/Mediterranean locust,

***Dociostaurus maroccanus*** (Thunberg), Italian locust, ***Calliptamus italicus*** (Linne), tree locust, ***Anacridium melanorhodon*** (Walker), the Senegalese grasshopper, ***Oedaleus senegalenis*** (Krauss), or the stink grasshopper, ***Zonocerus variegatus*** (Linne). No outbreaks are expected during the forecast period.

No reports were received on locusts from Latin America or other countries in the region.

The locust campaign in Afghanistan has more or less been successfully completed. Plans for capacity building to help implement early interventions during the next breeding season to avert potential outbreaks are being initiated.

8. **Armyworm, *Spodoptera exempta* (Walker)**. No reports were received on armyworm in the DLCO/EA or the IRLCO/CSA member countries. Significant armyworm activities are not expected during the forecast period.

9. **Red-billed quelea, *Quelea quelea* (L.)**. Red billed quelea birds were reported causing damage to small grain cereal crops in Narok, Nakuru, Uasin Gishu districts of Rift Valley Province and in Nyando, Kisumu, Homa Bay, Siaya and Suba districts in Nyanza Province, Kenya. The birds attacked wheat, barley and rice fields causing substantial damage. Control operations were carried out by the Plant Protection Services in collaboration with DLCO/EA, which provided a spray aircraft. It is likely that both ground and aerial spray operations will continue until the bird populations are kept under control. Quelea birds were also reported causing damage to small grain cereal crops in

Arusha and

Klimanjaru Regions of Tanzania, where control operations are launched by the Plant Protection Services and the DLCO/EA. End of Summary.

**ENVIRONMENTAL SITUATION:  
WEATHER AND ECOLOGICAL  
CONDITIONS**

10. With the oscillation between 16-17 N and an occasional surge north of the oscillation area, the Inter-Tropical Convergence Zone (ITCZ) brought some rain to Hodhs Chargui and Gharbi, Assaba, Tagant, parts of Brakna, Tiris Zammou, and Inchiri, Mauritania in August. Adrar des Iforas, Tilemsi valley, and Tamesna, northern Mali, southern Air, Niger, and Abeche and Fada, eastern Chad also received moderate to good rains in August. As a result, conditions are expected to improve during the forecast period.

11. Moderate showers fell south of the Atlas Mountains in August and light rains fell along the Atlantic coast in Morocco, parts of northern Sahara, near Tindouf and Hoggar Mountains and along the Malian border in Algeria. However, breeding conditions are not expected to improve significantly.

12. Moderate to good rains fell in a number of places in the summer breeding areas in eastern Africa and the Red Sea coasts. As a results conditions have improved, especially in Sudan and Somali.

13. The Red Sea coastal plains of Saudi Arabia and Yemen received moderate to heavy rains in

August. Light to moderate rains have also fallen in the northern interior of Oman

and in the Musandam Peninsula. Condition are expected to improve in these areas.

14. Most of the summer breeding areas along the Indo-Pakistan border remained dry. Only a few light showers were reported in parts of Rajasthan, India during the first half of August. Consequently, breeding conditions are expected to remain unfavorable in these areas during the forecast period.

15. The weather conditions in the red locust outbreak areas remained dry with relatively high temperatures.

**DESERT LOCUST ACTIVITIES**

**16. Western and northwestern Africa.**

Isolated mature adults were seen in August in Mauritania at the following locations: 1702N/0941W, 1632N/0712W, 1829N/1131W, 1658N/1514W, with the largest infestation observed over 8,000 ha north of Aioun (1702N/0941W). Adult locust populations were reported (by nomads) on 17 August at Assamalmat (1905N/0024W) in Timetrine, Mali. No locusts were reported from Morocco, Niger, Chad, Senegal, Burkina Faso, Cape Verde, Gambia, Guinea Bissau and Guinea Conakry, Algeria, Tunisia and Libya.

17. Forecast: Small-scale breeding will occur and slightly increase the number of locusts in the southern and central Mauritania. Scattered adults

are likely to be present and breed in the Adrar des Iforas, Tilemsi, Timetrine and Tamesna, Mali, Tamesna and western Air, Niger as well as in the eastern and northeastern Chad, near Abeche and Fada where rains fell recently. A few locusts could also occur

towards the end of the forecast period in areas of recent rainfall in the Adrar Souttouf, southern Morocco. Other countries in the region will likely remain free from locusts.

**18. Eastern Africa, northeastern Africa, and the Near East.** No significant locust activities were reported in August in these regions except a few isolated adults that were seen on 23 August at 1249N/4414E on the coastal plains west of Aden, Yemen.

19. Forecast: Isolated adults are likely to be present and breed on a small-scale in Northern Darfur, Northern Kordofan, and the White Nile States, Sudan. Some adults may also begin appearing in the Red Sea coasts in Eritrea and start breeding toward the end of the forecast period. A few isolated locusts may be present and breed on a small-scale in areas of recent rainfall near Jizan, Saudi Arabia. Apart from these, the locust situation will likely remain calm in Kenya, Tanzania, Uganda, Oman, Kuwait, UAR, Bahrain, Iraq, Israel, Jordan, Qatar, Syria, and Turkey.

**20. Eastern region.** No significant locust populations were reported from the summer breeding areas in the eastern part of the desert locust outbreak regions-India, Pakistan, Iran and Afghanistan. Only very few isolated adults at a density of six insects per hectare were seen during

the second half of July and the first week of August in Tharparkar and the Cholchistan Desert, Pakistan along the Indian border. Locust numbers will continue to decline during the forecast period unless rains fall.

21. Forecast: Low numbers of adults are expected to persist in the Tharparkar and Cholistan deserts, Pakistan and the numbers will likely decline. No further developments are expected in the other countries in the region during the forecast period.

### **OTHER LOCUST AND GRASSHOPPER ACTIVITIES**

**22. Moroccan/Mediterranean locust, *Dociostaurus maroccanus* (Thunberg) and the Italian locust, *Calliptamus italicus* (Linne):** No reports were received on the Moroccan/ Mediterranean or the Italian locust in Central Asian countries. Surveys are currently underway to establish egg laying areas to plan effective early intervention next Spring. The campaign operations against the locust invasions in Afghanistan has been more or less successfully completed. Plans for capacity strengthening, which aims at implementing early interventions during the next breeding season to avert possibility for a potential outbreak is being initiated.

23. Forecast: No locust activities are expected to occur during the forecast period. Eggs that were laid by the Moroccan locust in Afghanistan and other countries in the region will remain inactive until the following cropping season.

24. Latin America and the Caribbean (LAC). No reports were received on locusts or grasshoppers in LAC countries.

25. Forecast. Limited activities may occur in a few places, but no significant developments are expected during the forecast period.

26. **Red locust, *N. septemfasciata* (Surville).** Several red locust concentrations and swarms of different sizes and densities were located and controlled in the Iku-Katavi, Malagarasi and Wembere outbreak areas in Tanzania. Surveys and control operations were carried out by IRLCO-CSA in collaboration with Plant Health Services of the Ministry of Agriculture and Food Security, Tanzania and the Desert Locust Control Organization for Eastern Africa (DLCO-EA). The Food and Agricultural Organization (FAO) provided financial assistance and a consultant on locusts and control operations were carried out against the red locust swarms and concentrations on more than 6,100 ha with close to 3,000 liters of Fenitrothion 96% ULV. Of the 6,100 ha swarms and concentrations covering close to 3,170 ha were located in the Iku-Katavi outbreak areas and controlled using a total of 1,580 liters of Fenitrothion 96% ULV. Over 90% of the Katavi plains had been burnt. Isolated to scattered locusts were flushed in the unburnt grass islands. In the Wembere outbreak area, where approximately 30% of the grass had been burnt, 25 locust swarms and concentrations covering close to 2,250 ha were controlled using 1,100 liters of Fenitrothion 96% ULV. In the Malagarasi Basin, where less than 30% of the plains had been burnt, four swarms and one concentration covering approximately 700 ha were controlled using 350 liters of Fenitrothion 96% ULV. The red locust

situation in the other outbreak areas, including Lake Chilwa plains in Malawi, Buzi-Gorongosa plains in Mozambique, Lake Rukwa plains in Tanzania, Kafue Flats and Mweru wa Ntipa plains in Zambia, remained relatively quite.

27. Forecast: The seasonal grass burning currently in progress in all the red locust outbreak areas is likely to further concentrate the locusts in unburnt grass islands. However, the probability of some of the swarms migrating out of the Iku-Katavi, Wembere, and Malagarasi outbreak areas and invading neighboring countries is reduced significantly after control operations were implemented. Nevertheless, the residual locust populations in the outbreak areas are likely to start laying eggs with the on set of the rains in late October.

**Note:** The end of the current drought affecting Zambia, Malawi, Swaziland, Mozambique and Zimbabwe, will likely trigger serious outbreaks of ETOPs affecting the traditional red locust as well as armyworm outbreak regions in Malawi, Mozambique, Zambia, and Zimbabwe. Post-drought outbreaks of brown locusts may also become more evident in southern Botswana, southern Namibia and South Africa. It is important that routine survey and monitoring activities are implemented.

28. **Madagascar migratory Locust, *locusta migratoria capito* (L.).** No detailed information was available on the Malagasy migratory locust at the time this report was compiled. A locust assessment report which is being prepared by an FAO expert is expected to be released soon. Meanwhile, the National Environmental Office and the Department of Plant

Protection conducted an environmental assessment on the locust control in the country to satisfy a requirement by the World Bank for disbursing funds. The assessment recommended that Fipronil can only be applied as a barrier treatment when used for locust control, the locust Unit's capability to implement a GIS-based surveillance system should be strengthened, a strategy for locust early warning system should be developed and locust operations should be decentralized.

**29. Brown locust, *Locustana pardalina* (Walker):** No reports were received on *brown locust, L. pardalina* (Walker). No outbreaks are expected during the forecast period, however, vigilant surveillance and monitoring are recommended to avoid any unexpected surprises and damage to crops and pasture.

#### ARMYWORM ACTIVITIES

**30. Armyworm, *Spodoptera exempta* (Walker).** No report was received on Armyworm outbreaks from the DLCO/EA or IRLCO-CSA member countries.

**31. Forecast:** Most of the DLCO/EA and IRLCO/CSA member countries are likely to remain free from any serious armyworm infestations during the forecast period.

#### QUELEA BIRD ACTIVITIES

**32. Red-billed quelea, *Quelea quelea* (L.).** Red billed quelea birds were reported causing damage to small grain cereal crops in Narok, Nakuru, Uasin Gishu districts of Rift Valley Province and in Nyando, Kisumu, Homa Bay,

Siaya and Suba districts in Nyanza Province, Kenya. The birds attacked wheat, barley and rice fields causing substantial damage. Control operations were carried out by the Plant Protection Services in collaboration with the help of DLCO-EA's spray aircraft. Quelea birds were also reported causing damage to small grain cereal crops in Arusha and Kilimanjaro Regions of Tanzania, where control operations are launched by the Plant Protection Services and the DLCO-EA.

**33. Forecast:** Quelea birds are likely to continue being a problem to small grain cereal growers in the Rift Valley Province of Kenya and the Arusha region of Tanzania. Both ground and aerial spray operations are likely to continue in Tanzania to keep the bird under control.

#### RECOMMENDATIONS

**34.** Although the current locust and other migratory pest populations, by and large, did not call for significant control actions, some intensive control operations were carried out against red locusts in Tanzania and quelea birds in Kenya and Tanzania. It should be noted that, if left unattended, there is a likelihood for the pest populations to gradually increase in the coming months to a level that could pose serious threats to crops and pasture. Therefore, it is crucial that regular surveillance and monitoring are maintained and that reports are communicated promptly to the appropriate bodies within the national, regional and international systems.

#### ACTION REQUESTED AND CONTACT INFORMATION

35. The Africa Emergency Locust/ Grasshopper Assistance (AELGA) project is administered by the United States Agency for International Development (USAID), Bureau for Africa (AFR), Office of Sustainable Development (SD), Crisis Mitigation and Recovery division (CMR). AELGA works closely with the United Nations' Food and Agriculture Organization (UN/FAO), DLCO/EA, IRLOC/CSA, USAID bilateral and regional missions, research establishments, and host country ministries and also shares reports with the Information Core for Southern Africa Migratory Pests (ICOSAMP) to provide continuous monitoring and analysis of risks associated with ETOPs that have the potential for large-scale emergency outbreaks. Through these efforts, AELGA collects information and data on ETOPs to compile and disseminate its SITREPS to all interested parties. Unsolicited reports or information about ETOP situations and activities in your region or country are always welcome and appreciated.

36. Missions with programs on food security, emergency pests and other related activities, host countries and regional organizations with similar portfolios, and other stakeholders are **kindly requested to forward their reports by the last day of the reporting month or within the first three days of the following month. Please, forward reports, information, questions, and/or requests to Dr. Yeneneh T. Belayneh, [ybelayneh@ufr-sd.org](mailto:ybelayneh@ufr-sd.org) FAX: 202-219-0506 (USA)** with a cc to Drs. Joe Vorgetts ([jvorgetts@ufr-sd.org](mailto:jvorgetts@ufr-sd.org)) and Harry Bottenberg, [Hbottenberg@ufr-sd.org](mailto:Hbottenberg@ufr-sd.org)

**For more information on the weather**

**conditions, please, visit the following web sites:**

<http://www.fao.org/WAICENT/faoinfo/economic/giews/economic/english/esahel/sehtoc.htm>

<http://www.fews.net>

**For more information on ETOPs activities, you may visit:**

<http://www.fao.org/news/global/locusts/locuhome.htm>

<http://www.english.newsroom/news/2002/5000-en.htm/>

**TO LEARN MORE ABOUT AELGA'S ACTIVITIES, DO VISIT US AT OUR WEB SITE:[WWW.AELGA.NET](http://WWW.AELGA.NET)**

### **UPCOMING EVENTS**

Interregional Trainer Training Course on Alternative Application Strategies and Tactics (AAST) for acridid control. Nov. 2002. **Those interested can contact Dr. Yeneneh T. Belayneh, [ybelayneh@ufr-sd.org](mailto:ybelayneh@ufr-sd.org), phone/fax: 202-219-0495/202-219-0506 (USA)**

*u:\...\NewSitreps\sitrep..08.02.CLMN.wpd*